

California Regional Water Quality Control Board Central Valley Region

Robert Schneider, Chair

Sacramento Main Office

11020 Sun Center Drive #200, Rancho Cordova, California 95670-6114 Phone (916) 464-3291 • FAX (916) 464-4645 http://www.waterboards.ca.gov/centralvalley



To: Margie Lopez-Read

Senior Environmental Scientist Monitoring and Assessment Unit

Irrigated Lands Conditional Waiver

Program

FROM: John Swanson

Environmental Scientist

Monitoring and Assessment Unit

Irrigated Lands Conditional

Waiver Program

DATE: 6 June 2006 SIGNATURE:

REVIEW OF SEMI-ANNUAL MONITORING REPORT – WESTSIDE SAN JOAQUIN RIVER WATERSHED COALITION

The Central Valley Regional Water Quality Control Board (Water Board) has received the Semi-Annual Monitoring Report (SAMR) from the Westside San Joaquin River Watershed Coalition (Coalition). The SAMR was dated 31 December 2005, and was received on the same date. This report was submitted to meet the conditions of Resolution R5-2003-0105, and the associated Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands adopted by the Water Board on 11 July 2003.

Water Board staff has reviewed the SAMR to evaluate the document for the required reporting elements detailed in Resolution R5-2003-0105, to evaluate the document for the technical and reporting requirements set forth in both the Monitoring and Reporting Program No. R5-2005-0833 for Coalition Groups (MRP), and the Coalition's Monitoring and Reporting Program Plan (MRP Plan), and to assess the quality of the data generated and the conclusions and recommendations presented in the report. The review has been separated into three major categories: 1) a discussion of administrative aspects, 2) a discussion of analytical aspects, and 3) a discussion of waiver compliance.

ADMINISTRATIVE ASPECTS

The SAMR was dated and received on 31 December 2005, which was the established due date. The report has been evaluated for the presence and completeness of several key components as described in the MRP including: a description of the watershed, monitoring objectives, sampling site descriptions, a location map including sampling sites, tabulated results from sample analysis, sampling and analytical methods, chain-of-custody forms, quality control sample results including a summary of precision and accuracy, pesticide use information, data interpretation, a summary of management practices used, actions taken to address identified water quality impacts from agricultural discharges, exceedance reports, communication reports, evaluation reports, conclusions and recommendations. Overall, the required elements were complete and satisfactory. Monitoring locations and sampling frequency were evaluated against the MRP requirements and against the MRP Plan. Exceedance and Communication reports were transmitted in accordance with the MRP, and

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were evaluated. Although the overall completeness and quality of the Annual Report was determined to be satisfactory, some deficiencies were noted. The items listed below include descriptions of observed deficiencies, associated recommendations, and/or requests for clarification or additional information.

- Item 1: The report states that additional bioassessment studies are underway, and that the study reports not yet available. The coalition should provide the bioassessment reports once they are complete and available, and in the interim provide a schedule indicating when these reports will be submitted to staff.
- Item 2: In Table 2 of the report, the number of irrigation season sampling events is indicated as 8 events per year. The coalition collected 6 irrigation events (monthly sampling events from March through August). The number of irrigation sampling events indicated in the table may include the possibility of irrigation and related sampling events that may occur in the months of February and September. The Coalition should confirm this interpretation or clarify the number of planned and actual irrigation sampling events.
- Item 3: Attachment 1 to the report is a table of sampling event details. This element has been added to the format of the Coalition's SAMR since the previous monitoring report, and is a very helpful summary for review and evaluation. However, there are a few apparent errors in the table. For both Events 9 and 10, the table in Attachment 1 indicates that samples were collected at the Ramona Lake and Marshall Road Drain locations, when in fact, the analytical reports and COC forms indicate that no samples were collected at these sites for Events 9 and 10. Also, for Event 10, the table in Attachment 1 indicates that samples were not collected at both Del Puerto Creek sample locations, however COC forms and analytical reports indicate that samples were collected at both Del Puerto Creek sites during Event 10. These appear to be errors in the table. The Coalition should confirm this information for clarification.
- Item 4: Section 6 of the report states that 16 toxic results were observed during the course of the sampling events reported in this SAMR. The table in Attachment 2 indicates that there were 17 toxic results, however two toxic results (toxicity to two test species) were observed in a sample collected from one location on one day. Restated, there were 16 water samples collected that exhibited toxicity to at least one test species, but the total number of toxic results was 17. No correction is necessary, however the Coalition should confirm that this is the correct interpretation of the reported information.
- Item 5: The COC forms for Event 8 indicate that samples were collected on 2/8/05, submitted on 2/5/05, and received at BSK on 2/16/05. This seems to be an error in recording or transcribing the dates on this COC form. No similar errors were noted on other COC forms, however the Coalition should review the COC forms from this sampling event (Event 8) and provide a brief evaluation of the discrepancy.
- **Item 6:** The Coalition collected additional samples for herbicides analysis from locations that exhibited toxicity to algae during the storm sampling event that occurred on 15 and 16 February, 2005. These additional samples were collected several days after the original samples that exhibited toxicity. This additional analysis was performed in an effort to identify the cause of algae toxicity in the original samples. Although the follow up analysis for herbicides produced additional and useful information, there was no discussion of the potential

limitations on the data resulting from the difference in time between collection of the two samples. It is recommended that if, in the future, follow up analysis is performed on a second sample collected on a different day, that this be discussed in the text of the report, with an evaluation of the potential effects on the data.

Item 7: The COC forms for the analysis of TOC and DOC on samples from the northern coalition area (10 locations from Hospital Creek to Orestimba Creek) for Event 13 were missing from Appendix A. Results for these analyses are included in the SAMR. This omission appears to be an oversight. Also, a COC form for East San Joaquin Coalition samples for analysis of toxicity to Hyalella was inadvertently included in Appendix A. These oversights are relatively minor, and have negligible impact on the SAMR.

Item 8: The Coalition MRPP and Table 2 of the SAMR indicate that OP pesticides analysis will be conducted monthly during the irrigation season at the sampling location on the San Joaquin River at Sack Dam. Analysis of OP pesticides was not conducted on samples collected at this location during the 2005 irrigation season, although general chemistry analyses were performed. Pesticide analysis was performed on the sample collected at this location during the February 2005 rain event. This location is described in the MRP Plan as a site that is primarily used to evaluate the quality of source water that is diverted to part of the coalition area, however it also represents drainage from southern portions of the coalition area. The Coalition should provide a discussion of the purpose of this monitoring site, conduct analyses identified in the MRP Plan, and thoroughly evaluate the results.

Item 9: Laboratory reports for TOC, DOC and E. coli for the 10 sites in the northern portion of the Coalition area (from Hospital Creek to Orestimba Creek) and for all general chemical analyses and physical parameters for the southern sites (from Newman Wasteway to the San Joaquin River at Sack Dam) for the samples collected 8 February 2005, were missing from Appendix F. All other laboratory reports appeared to be present. This is considered a relatively minor oversight, and no request to provide these reports is necessary at this time, however, these lab reports should be retained by the Coalition and made available upon request by Central Valley Water Board Staff.

Item 10: Field data sheets, and complete reports for toxicity analyses including all raw laboratory data (hand-recorded observations, etc.) are provided in Appendix F. For general chemistry and organic chemistry analyses, summary laboratory reports with sample results and QC results are provided, with no raw data (chromatograms, instrument printouts, calibration data, etc. are not included). Staff and Coalition personnel have discussed this item, as it pertains to the administrative aspects of the program and to the Coalition's compliance with the Waiver requirements. The laboratory reports, as submitted, meet the current needs of program staff, however a strict interpretation of the MRP requirement to submit copies of "all field documentation and laboratory original data," potentially places the Coalition in a position of non-compliance. The potential need for all chemistry laboratory raw data relates to technical and legal issues. From a technical standpoint, raw data packages allow the opportunity for data validation and further evaluation at the agency level, (which is not currently performed). From a legal standpoint, the packages would be necessary should third-party data validation or review be required as part of a legal proceeding in which the quality of the data was called into question. The Coalition has stated that the raw data are archived and can be made available upon request for a minimum of five years after submittal. No further action is required at this

time, however the Coalition will need to ensure that the chemistry raw data can be provided by the laboratory upon request from the Central Valley Water Board staff.

Item 11: Additional information on the status of the implementation of Management Practices (MPs) and the status of the grants and other funding projects described in the SAMR is desired. The Water Board may request further information on these topics. Staff will contact the Coalition to discuss the specific information that should be submitted through Communication Reports or other processes.

ANALYTICAL ASPECTS

Item 12: The Coalition routinely performs an organophosphate (OP) pesticide scan (analysis) on samples collected from most of their monitoring locations, according to the criteria in their MRP Plan. The scan includes a number of compounds required for analysis under Phase 2 monitoring, as indicated in Table 1 of the MRP, as well as additional compounds that are not currently required under the MRP, but are used within the Coalition area. These data provide valuable additional information used to characterize water quality in the area. The Practical Quantitation Limits (PQLs) reported in the SAMR for Azinphos-methyl, Chlorpyrifos, and Diazinon are higher than the PQLs listed in Table 1 of the MRP. This places some limitation on the use of these data. The Coalition has previously stated that the PQLs provided were the lowest practicable limits that could be achieved by local, accredited labs using approved methods. Since the Coalition's last monitoring report, the Coalition's contract laboratory has generated updated method detection limits (MDLs) for Chlorpyrifos and Diazinon, and these two constituents are now reported to the PQLs listed in Table 1 of the MRP. This is a significant improvement, because Chlorpyrifos and Diazinon are recognized constituents of concern in the watershed. Non-detected results for Azinphos-methyl (and the other compounds listed in Table 1) should also be reported at the PQLs as listed in Table 1. The use of any other PQL values must be specifically requested, justified, and approved by the Executive Officer.

Item 13: No samples were collected at the Salado Creek location from February through August, due to problems with site access. Standing water may have blocked the access road leading to the sample location, and at times, the sample location was reported to be partially submerged by the San Joaquin River. The Coalition has discussed eliminating this site from the monitoring program due to problems with site access, and also due to the fact that the sample location receives significant urban influence from the City of Patterson, upstream from the sample location, which confounds the evaluation of agricultural influences. If the Coalition wishes to eliminate this site from the program, representatives must submit a written request to do so, with an associated explanation. Any changes in the monitoring (including site location changes) should be included as part of the Coalition's revised MRP Plan, which is under development.

Item 14: No sediment toxicity samples were collected from the Marshall Road Drain location. This drain is an underground pipe, and it is reasonable that sediment may not accumulate at the monitoring location and that no sediment samples are collected there. The Coalition should describe how suspended sediments are prevented from entering the drain, (potentially causing blockage). Additionally, it would be helpful if the Coalition provided information on who owns and maintains the Marshall Road Drain.

Item 15: The value for electrical conductivity at the San Joaquin River at Lander Ave. during the April sampling event (Event 10) is listed as 4096 μ s/cm in Attachment 4. The value for this measurement in Appendix A (Field Data Summary) is listed as 490 μ s/cm. Given the other conductivity values measured at this location, the reviewer assumes the value in Attachment 4 is a typographical error, and the correct value is 490. The Coalition should confirm this observation, or provide an appropriate explanation.

Item 16: Review of the laboratory reports and laboratory narratives indicates that the recommended analytical holding times for analysis were exceeded in the following samples, as described:

- a) Event 8 (8 February 2005), color, laboratory pH, total dissolved solids, total suspended solids, and turbidity for samples from Ingram Creek, Westely Wasteway, Ramona Lake, Marshall Road Drain, Orestimba Creek at River Road and at Highway 33;
- b) Event 9 (8 March 2005) total organic carbon and dissolved organic carbon for the field duplicate sample from Mud Slough,
- c) Event 14 (9 August 2005), color, laboratory pH, and turbidity for samples from Newman Wasteway, Los Banos Creek at Highway 140, Hospital Creek, Ingram Creek, Westley Wasteway, Del Puerto Creek, San Joaquin River at intake pumps, Westley Wasteway at the wildlife refuge, and Hospital Creek at the return ponds,
- d) Rain Event 2 (15 and 16 February 2005), E. coli for samples from Hospital and Ingram Creek, and color, laboratory pH, and turbidity in samples from Hospital Creek, Ingram Creek, Del Puerto Creek at Highway 33, and Ramona Lake.

These holding time exceedances were noted in the appropriate laboratory reports. The values for the affected analyses were not outside the range of other measurements of the same parameters collected at the affected locations, and the holding times were not grossly exceeded (holding times of less than 7 days were exceeded by less than a factor of 2, which is the U.S. EPA criterion for rejection of data). The affected values should be considered estimates, but the overall impact to the evaluation of water quality in the watershed is minimal. The reasons for the exceedances were discussed in the laboratory reports, and no additional information is needed for evaluation, at this time.

Item 17: The quality control limits applied and reported in the laboratory reports from APPL for Phorate and the surrogate compound Triphenylphosphate do not match those established in the Coalition's QAPP. Other quality control limits for the OP pesticide analysis listed in the laboratory reports match the limits in the QAPP. The Coalition's lab should meet the limit values in the MRP Plan or propose a revision to the MRP Plan QAPP.

WAIVER COMPLIANCE

In general, the Coalition complied with the requirements set forth in the Conditional Waiver and the MRP. It should be noted that the Coalition is including bioassessments in the evaluation of the watershed, which is encouraged, but not required, in accordance with the MRP. Issues related to Conditional Waiver compliance, and not already discussed above, are detailed below.

Item 18: The MRP currently requires re-sampling of a monitoring location when toxicity (defined as a significant difference compared to the control sample) is observed, in an attempt to estimate the duration of toxicity in the water column. The existing MRP requirement does not vary according to seasonality or the magnitude of the toxic response. The SAMR indicates that the Coalition re-sampled locations during the irrigation season only, and only when toxicity was observed with the test species exhibiting a greater than 50% difference in survival or growth, compared to control. This is not compliant with the MRP, and failure to re-sample is considered a violation of MRP requirements. The existing MRP requires that re-sampling occur whenever there is any significant toxicity as compared to the laboratory control. The Coalition must revise their resampling protocol immediately to address the correct trigger for re-sampling.

Item 19: The Coalition analyzed samples for the following 303(d) listed constituents, on monitored water bodies, as required by the MRP: Chlorpyrifos, Diazinon, Azinphos-methyl, electrical conductivity, and toxicity. The Coalition references the Water Board's SWAMP program data to establish monitoring data for the following additional components that are 303(d) listed in the water bodies monitored by the Coalition: Selenium in Salt Slough; and Selenium and Boron in Mud Slough.

The MRP requirement for Phase I includes monitoring for "all 303(d) pollutants identified in downstream waterbody(s) and discharged to land or surface water within the watershed." This is intended to mean that sample locations need to be monitored for constituents that are 303(d) listed in waterbodies immediately downstream from the location, and for constituents that are listed as having agriculture as a potential source, or unknown sources. This requires the coalition to analyze samples for additional constituents (based on 303(d) listed constituents from channels immediately downstream from the channels where monitoring locations are established). The following table provides information on the 303d listed constituents in the water bodies monitored by the coalition, 303d listed constituents in the water bodies immediately downstream of the monitored water bodies, and the constituents to be monitored to satisfy the MRP requirement

Monitored Water Body	Monitored Body is listed for these 303d constituents	Monitored Body Flows into: (Immediately downstream Water Body)	Downstream Water Body is listed for these 303d constituents:	Monitored Water Body should be monitored for these constituents*:
Hospital Creek	Chlorpyrifos, Diazinon	Ingram Creek	Chlorpyrifos, Diazinon	Chlorpyrifos, Diazinon
Ingram Creek	Chlorpyrifos, Diazinon	San Joaquin River between the Merced River and South Delta boundary	Boron, Chlorpyrifos, Diazinon, DDT, Conductivity, Group A pesticides, mercury, unknown toxicity	Boron, Chlorpyrifos, Diazinon, DDT, Conductivity, Group A pesticides, unknown toxicity
Westley Wasteway	None	San Joaquin River between the Merced River and South Delta boundary	Boron, Chlorpyrifos, Diazinon, DDT, Conductivity, Group A pesticides,	Boron, Chlorpyrifos, Diazinon, DDT, Conductivity, Group A pesticides,

Monitored Water Body	Monitored Body is listed for these 303d constituents	Monitored Body Flows into: (Immediately downstream Water Body)	Downstream Water Body is listed for these 303d constituents:	Monitored Water Body should be monitored for these constituents*:
			mercury, unknown toxicity	unknown toxicity
Del Puerto Creek	Chlorpyrifos, Diazinon	San Joaquin River between the Merced River and South Delta boundary	Boron, Chlorpyrifos, Diazinon, DDT, Conductivity, Group A pesticides, mercury, unknown toxicity	Boron, Chlorpyrifos, Diazinon, DDT, Conductivity, Group A pesticides, unknown toxicity
Salado Creek	None	San Joaquin River between the Merced River and South Delta boundary	Boron, Chlorpyrifos, Diazinon, DDT, Conductivity, Group A pesticides, mercury, unknown toxicity	Boron, Chlorpyrifos, Diazinon, DDT, Conductivity, Group A pesticides, unknown toxicity
Ramona Lake	None	San Joaquin River between the Merced River and South Delta boundary	Boron, Chlorpyrifos, Diazinon, DDT, Conductivity, Group A pesticides, mercury, unknown toxicity	Boron, Chlorpyrifos, Diazinon, DDT, Conductivity, Group A pesticides, unknown toxicity
Marshall Rd. Drain	None	San Joaquin River between the Merced River and South Delta boundary	Boron, Chlorpyrifos, Diazinon, DDT, Conductivity, Group A pesticides, mercury, unknown toxicity	Boron, Chlorpyrifos, Diazinon, DDT, Conductivity, Group A pesticides, unknown toxicity
Orestimba Creek (below Kilburn Rd.)	Azinphos-methyl, Chlorpyrifos, DDE, Diazinon, unknown toxicity	San Joaquin River between the Merced River and South Delta boundary	Boron, Chlorpyrifos, Diazinon, DDT, Conductivity, Group A pesticides, mercury, unknown toxicity	Azinphos-methyl, Boron, Chlorpyrifos, Diazinon, DDT, DDE, Conductivity, Group A pesticides, unknown toxicity
Newman Wasteway	Chlorpyrifos, Diazinon	San Joaquin River between Mud Slough and the Merced River	Boron, Chlorpyrifos, Diazinon, DDT, Conductivity, Group A pesticides, mercury, selenium, unknown toxicity	Boron, Chlorpyrifos, Diazinon, DDT, Conductivity, Group A pesticides, selenium, unknown toxicity
San Joaquin River at Sack Dam (between Mendota Pool and Bear Creek)	Boron, Chlorpyrifos, Diazinon, DDT, Conductivity, Group A pesticides, unknown toxicity	San Joaquin River between Bear Creek and Mud Slough	Boron, Chlorpyrifos, Diazinon, DDT, Conductivity, Group A pesticides, mercury, unknown toxicity	Boron, Chlorpyrifos, Diazinon, DDT, Conductivity, Group A pesticides, unknown toxicity
San Joaquin River at Lander Ave. (between Bear Creek and Mud Slough)	Boron, Chlorpyrifos, Diazinon, DDT, Conductivity,	San Joaquin River between Mud Slough and the Merced River	Boron, Chlorpyrifos, Diazinon, DDT, Conductivity, Group A pesticides,	Boron, Chlorpyrifos, Diazinon, DDT, Conductivity, Group A pesticides,

Monitored Water Body	Monitored Body is listed for these 303d constituents	Monitored Body Flows into: (Immediately downstream Water Body)	Downstream Water Body is listed for these 303d constituents:	Monitored Water Body should be monitored for these constituents*:
	Group A pesticides, mercury, unknown toxicity		mercury, selenium, unknown toxicity	selenium, unknown toxicity
Mud Slough	Boron, Conductivity, Pesticides, Selenium, unknown toxicity	San Joaquin River between Mud Slough and the Merced River	Boron, Chlorpyrifos, Diazinon, DDT, Conductivity, Group A pesticides, mercury, selenium, unknown toxicity	Boron, Chlorpyrifos, Diazinon, DDT, Conductivity, Group A pesticides, selenium, unknown toxicity
Salt Slough	Boron, Chlorpyrifos, Diazinon, Conductivity, unknown toxicity	San Joaquin River between Bear Creek and Mud Slough	Boron, Chlorpyrifos, Diazinon, DDT, Conductivity, Group A pesticides, mercury, unknown toxicity	Boron, Chlorpyrifos, Diazinon, DDT, Conductivity, Group A pesticides, unknown toxicity
Los Banos Creek	None	Mud Slough	Boron, Conductivity, Pesticides, Selenium, unknown toxicity	Boron, Conductivity, Pesticides, Selenium, unknown toxicity
Turner Slough	None	San Joaquin River between Bear Creek and Mud Slough	Boron, Chlorpyrifos, Diazinon, DDT, Conductivity, Group A pesticides, mercury, unknown toxicity	Boron, Chlorpyrifos, Diazinon, DDT, Conductivity, Group A pesticides, unknown toxicity

^{*} Mercury is not included, because resource extraction is listed as the potential source.

It should be noted that implementation of analysis for all Phase II chemical constituents will accomplish the analytical requirements for the 303d listed constituents at all locations, with the exception of Group A pesticides. If Group A pesticides were added to the list of organochlorine pesticides required under Phase II monitoring, then all 303d and Phase II analytical constituents required under the MRP would be included at each of the coalition's monitoring locations.

The Coalition should provide a description of the Coalition's plans for 2006/2007 monitoring that will address the existing requirement for 303d listed constituents.

Item 20: The Coalition does not currently perform follow up activities related to exceedances of general chemical, E. coli, and physical parameters such as total dissolved solids, and conductivity. Although historical results from some waterways within the coalition area and from some coalition monitoring sites frequently exceed target water quality objectives for these parameters, the Coalition should still evaluate the cause and sources of these exceedances. If the exceedances are from naturally occurring media or from other industrial activities such as confined animal facilities, the Coalition should still provide this evaluation through the Communication Report process, along with any available information on other programs or permits that might apply to the apparent waste discharges. If the exceedances can be shown to originate from a non-agricultural source, the rationale for drawing that conclusion should be included in the Communication Report, otherwise the Coalition must describe attempts to

identify agricultural sources and efforts to control them through management practices. The Coalition should review past Exceedance and Communication Reports for exceedances of general chemical and physical parameters. In instances where the same water quality objective (e.g. electrical conductivity) was exceeded more than once at the same location, and no additional follow up actions were initiated by the Coalition, further action is required. In those instances, the Coalition should provide at least one additional Communication Report providing an evaluation of the exceedances including potential sources, practices potentially affecting the discharge, actions taken or a plan of action to identify the sources of the discharge, other programs (e.g. TMDLs, permits) that may already be addressing the problem, and if agriculture is a potential source, a plan to further evaluate and correct the problem.

Item 21: The Coalition did not return to collect samples at locations upstream from locations where toxicity was observed. Water Board staff and the Coalition have discussed the Coalition's proposed alternatives to upstream sampling, based on the potential limitations on the data that upstream sampling may provide for specific creeks in the Coalition area. The Coalition suggests that attempting to pinpoint the source(s) of certain waste discharges may not be an efficient way to identify and mitigate specific problems, whereas a regional approach to MP implementation in areas with identified problems may be a more efficient and advantageous way of improving water quality. This regional approach would entail collaborative efforts of multiple growers in a defined area utilizing similar cropping, irrigation, and pesticide application practices, thereby reducing future problems. The Coalition has stated that they are developing a pesticide management strategy and a sediment management strategy for areas that have repeatedly exhibited water quality problems related to those constituents. The Coalition is not in compliance with the upstream sampling requirement as described in the MRP, however the proposed management strategies could be designed to address the intent of the upstream sampling requirement by identifying all potential source areas for the observed water quality exceedances, and describing ongoing and newly implemented management practices in place to mitigate the water quality impairments that have been identified.

Item 22. Staff has previously requested that the Coalition add an appropriately placed monitoring location in the upper reaches of the Salt Slough/Mud Slough watershed. Although the Coalition monitors water quality in Salt Slough and Mud Slough at downstream locations, staff believes that the area near the intersection of Highways 33 and 152 is under-represented by the Coalition's monitoring efforts, and samples from agricultural drains in that general area collected by other monitoring programs have exhibited toxicity and the presence of pesticides. The Coalition should provide the proposed location and monitoring schedule for a new monitoring site in this area, for review by staff.

Item 23: The laboratory reports from APPL indicate results for OP pesticides generated from two instruments (NPD03 and NPD04), however one set of MDL values are referenced for both instruments. The ID numbers may refer to two detectors on the same instrument. The Coalition should provide a description for the use of the MDLs related to the OP pesticide results and instrument identification numbers reported.

Attachment(s)

CC:

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Notes, discussion

1. Item 10

(John – I trust they are submitting the raw data sheets for toxicity analyses and the only raw data we are missing is chromatrograms and instrument printouts, including calibration data? Can you confirm that with me? If they are not providing other raw data, then they need to be doing that right now and that is a significant shortcoming....)

Correct. They are submitting the raw data for the toxicity testing including hand-recorded observations and measurements. They are not providing raw data for the chemistry.

If we decide that we want Westside and other coalitions to provide raw data for chemistry, I think we will need to specifically list what we want provided. For example, in addition to chromatograms and calibration raw data, there might be initial and continuing calibration summaries (forms), injection logs, instrument raw data and chromatograms for calibration standards for GC analyses, Endrin and DDT breakdown check results and raw data for organochlorine analyses, mass spec tuning data and mass spectra for any mass spec analyses, for metals: interference checks, continuing blanks, and also things like balance calibration logs, NIST reference standard certifications, etc. We would just have to provide a list. For general chemistry (pH, TDS, turbidity) this only amounts to a few pages per sample, but for the required pesticides it would be several thousand pages for a Westside report.

2. Item 19

To satisfy this requirement, the constituents identified as Group A Pesticides need to be added to the compound list. (John – I would list the sites names that need these OC pesticides here.....) Please provide a description of the Coalition's plans for 2006 Irrigation Season, including Phase 2 monitoring, that will address the existing requirement for 303d listed constituents. (I will give them a deadline date in their cover letter for this)

Margie – there are two concepts here. One is compliance with the requirement to monitor for components that are 303d listed in downstream water bodies. The other is monitoring for Phase 2 constituents (everything in Table 1 of the MRP). I was basically combining them (suggesting that the coalition add "Group A" pesticides to the organochlorine scan that they should do at all locations for phase 2, thereby catching all the 303d listed stuff at the same time). We discussed that I should keep these two ideas separate in the SAMR review letter. I added a table for 303d listed constituents, based on our interpretation. Since we have not raised this issue before, and the coalition is nearly 2 years into their monitoring, I expect them to request some time to implement this; as you said we could give them a deadline.

Item 19, last paragraph: . Margie – let me know if you think we should include this sentence. We discussed keeping the ideas of the 303d requirement and phase 2 requirements as separate ideas. I only include it to note that appropriately added analyses would comply with both requirements, but this is something that could be communicated to them outside the SAMR review letter.

3. Item 20.

(probably would be good to use some direct language out of the MRP that describes the requirements for Exceedance and Communication report contents.

Margie – let's discuss this one more time. Item 20 pertains to follow up activities, and also to the reporting of follow up activities, specifically with regard to general chemical and physical parameters that exceed water quality objectives. I went out on a limb with my request to the coalition to provide additional info on past exceedances of these parameters, and it's probably worthy of a little more consideration of what we say we want them to do. I'm not sure my approach is best, considering we want to be consistent in our responses to different coalitions.